

BLUNT-LOBE GRAPEFERN

Botrychium oneidense (Gilbert) House

ADDER'S-TONGUE FAMILY (OPHIOGLOSSACEAE)



Plants: Small, leathery, perennial herbs about xx cm tall.

Leaves: Of 2 types, a single short-stalked, sterile blade below a single fertile blade (see spore clusters); **sterile blades leathery, wintergreen**, bluish green, more or less flat, , **2-3 times divided**, triangular in outline, up to 20 cm long and 15 cm wide, on a 2-15 cm stalk 1.5-2.5 times as long as the blade; main segments (pinnae) in 1-5 pairs, usually well separated and similarly spaced, divided in the lower 2/3-3/4; secondary segments (pinnules) obliquely ovate, edged with rounded to pointed teeth, pinnately veined.

Spore Clusters: Small, spherical, yellow, stalkless spore sacs (sporangia) borne on specialized, fertile leaf blades; fertile blades **single**, 1.5-2.5 times as long as the sterile blade, **2-3 times divided**, tapered to long, slender stalk.

Habitat: Moist to wet, acidic, shady woods and swamps; often in disturbed habitats.

Status: S1; G4Q



Notes: This species is also known as *Sceptridium oneidense* (Gilbert) Holub, *Botrychium dissectum* Spreng. var. *oneidense* (Gilbert) Farwell, *Botrychium multifidum* (S.G. Gmelin) Trevis. var. *oneidense* (Gilbert) Farwell, *Botrychium ternatum* (Thunberg) Swartz var. *oneidense* Gilbert; Oneida grape fern • Named *oneidense* after Oneida County, New York. • Blunt-lobed moonwort is another rare *Botrychium* with sporadically occurring, widely separated, and extremely small populations. Current status is Global G4Q, apparently secure; United States N4 (Connecticut SU, Delaware S1.1, District of Columbia SX, Illinois S1, Indiana S3, Kentucky SH, Maine SU, Maryland S1, Massachusetts S1?, Michigan SNR, Minnesota S1, New Hampshire SNR, New Jersey S2, New York S2S3 [S1?], North Carolina S2, Ohio SNR, Pennsylvania SNR, Rhode Island SH, Tennessee S1, Vermont S1, Virginia S2, West Virginia S3, Wisconsin S2; Canada N3 (Alberta S1, Manitoba SNR, New Brunswick S1, Ontario S3, Quebec S1) • *B. oneidense* resembles *B. multifidum* in general size and shape, but *B. oneidense* has more unequally divided leaf segments (the tip segments are more elongate and less divided than the basal segments). *B. oneidense* is also very similar to the eastern species, *B. dissectum*, however, the live roots of *B. oneidense* are pale gray to tan and slender (2.5 mm in diameter, 1 cm from the stem), whereas those of *B. dissectum* are usually dark grey-brown and thicker (about 3 mm in diameter 1 cm from the stem); the leaflets of *B. oneidense* are blunt tipped, whereas those of *B. dissectum* are somewhat pointed; *B. oneidense* leaves are mostly green, whereas those of *B. dissectum* are reddish when young and often bronze colored in winter. • Grazing has been associated with establishment and continuation of *Botrychium* habitat. Some human disturbance may even be beneficial. • Due to large distances between populations, spores are not usually available for recolonization when populations are lost. Preserves should include adequate buffer areas around occurrences.

